

CLAIMS:

1. (Currently Amended) An anti-microbial-adhesion pharmaceutical composition capable of being added to a food or drink for administration to a patient in need of such a composition comprising an effective amount of an isolated adhesion inhibitory fraction from *Vaccinium* juice as an active ingredient and a pharmaceutically acceptable carrier or diluent, said isolated fraction having

- (a) a molecular weight of $\geq 14,000$ kDa; and
 - (b) anti-adhesion activity against *H. pylori*;
 - (c) an elemental analysis of carbon 43-51%, hydrogen 4 - 5%, no nitrogen, no sulfur and no chlorine;
 - (d) an nuclear magnetic resonance (NMR) line spectrum as set forth in Figures 2A and 2B;
 - (e) an ultraviolet spectrum with an absorption peak at 280 nm in neutral or acidic pH solution which is absent in alkali solutions;
 - (f) coaggregation reversal and coaggregation inhibition activity against oral bacteria and
 - (g) an adhesion inhibitory activity against P fimbriated bacteria; and
- wherein the concentration of the isolated adhesion inhibitory fraction is between 1 μ g and 10 mg per milliliter (ml).

2. (Original) A method of treating *H. pylori* infection in a patient in need of such treatment by administering to the patient an effective amount of the composition as set forth in claim 1.

- 3. (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- 6. (Canceled)
- 7. (Canceled)
- 8. (Canceled)
- 9. (Canceled)
- 10. (Canceled)
- 11. (Canceled)

12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)

16. (Currently Amended) An anti-microbial adhesion pharmaceutical composition capable of being added to a food or drink comprising an effective amount of an isolated adhesion inhibitory fraction from *vaccinium* juice having a molecular weight \geq 14,000 kDa as determined by dialysis with a 14,000 kDa molecular weight cut off, and a pharmaceutically acceptable carrier or diluent said isolated fraction having anti-adhesion activity against *H. pylori*.

17. (Previously Presented) The composition according to claim 1, wherein said isolated fraction is selected from the group consisting assertially of PF-1, PF-2, and NDM.

18. (Previously Presented) The composition according to claim 1, wherein said isolated fraction is present in a range of 1 μ g to 10mg per milliliter.

19. (Currently Amended) A fortified food composition providing antimicrobial-adhesion activity comprising a suitable food carrier and an effective amount of an isolated adhesion inhibitory water extract fraction from *Vaccinium* having

- (a) a molecular weight \geq 14,000 kDa;
- (b) anti-adhesion activity against *H.pylori*;
- (c) an elemental analysis of carbon 43-51%, hydrogen 4 - 5%, no nitrogen, no sulfur and no chlorine;
- (d) a nuclear magnetic resonance (NMR) line spectrum as set forth in Figures 2A and 2B;
- (e) an ultraviolet spectrum with an absorption peak at 280 nm in neutral or acidic pH solution which is absent in alkali solutions; and

(f) an adhesion inhibitory activity against P fimbriated bacteria.

20. (Previously Presented) The composition as set forth in claim 19 wherein the food carrier is a fruit juice.

21. (Previously Presented) The composition as set forth in claim 20 wherein the fruit juice is cranberry juice.

22. (Canceled).

23. (Canceled).